

Nuclear Material Stabilization and Disposition (RL-0011)

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*PFP Standard Waste Boxes (SWBs)
loaded and shipped to the Central
Waste Complex*

*Completed demolition of
2731-Z*



HC-11 Water Wall



Overview

This section addresses work in Project Baseline Summary RL-0011, *Nuclear Material Stabilization and Disposition*.

NOTE: Unless otherwise noted, all information contained herein is as of the end of April 2005.

Notable Accomplishments

Disposition the Plutonium Finishing Plant (PFP) Facility

Legacy Holdup: Disposition of a cumulative total of 75 percent of legacy plutonium holdup material was achieved in April while a cumulative total of 85 percent of legacy plutonium holdup material was removed.

Legacy hold-up removal activities have been completed on the 26-inch process vacuum system header in rooms 262, 263, and 264 at 234-5Z Building. The cyclone separator has been removed from glovebox HA-9C and the water walls have been removed from around HC-11 glove box in 234-5Z.

Box Counter: The mobile box assay unit was delivered to the PFP laydown area on April 28, 2005, and will be relocated for permanent installation in May 2005.

234-5Z: Decontamination of three additional gloveboxes/hoods to low-level waste (LLW) criteria was completed, bringing the total to 24 decontaminated to LLW criteria.

Ancillary Facilities: Demolition of the ninth (2731-Z) and tenth (2902-Z Water Tower) ancillary buildings were completed in late April 2005. The facility-specific end point criteria was completed in April 2005 for 2731-Z, and will be completed for the 2902-Z Water Tower in early May 2005, four and one-half months ahead of schedule.

Issues

Special Nuclear Material (SNM) De-inventory Delay: The Department of Energy (DOE) authorization to allow shipment of Hanford plutonium material to the Savannah River Site, due by August 30, 2004, has not been received. New DOE direction has now been provided to FH. FH is to refocus efforts to support onsite storage of Category I material, but should be prepared to ship within six months of approval to proceed with de-inventory if a consolidational Record of Decision is issued.

FY 2005 Funds vs. Spend Forecast (\$M)

	Projected FY 2005 Funding	FY 2005 Fiscal Year Spend Forecast	Variance
Nuclear Materials Stabilization & Disposition	\$ 213.7	\$ 199.4	\$ 14.3

FY 2005 Schedule/Cost Performance (\$M)

	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance \$	Schedule Variance %	Cost Variance \$	Cost Variance %	Budget At Completion
Nuclear Materials Stabilization & Disposition	\$113.9	\$100.5	\$102.3	-\$13.4	-11.8%	-\$1.8	-1.8%	\$207.4

Numbers are rounded to the nearest \$0.1M and include the closure services allocation.

Schedule Performance (-\$13.4/-11.8%): Primary contributors to the unfavorable schedule performance include:

- Legacy plutonium holdup difficulties in 26-inch process vacuum line plug removal, and high radiation dose rates on gloveboxes HA-9A & HA-9E cleanout and decontamination.
- 232-Z glovebox Deactivation and Decommissioning (D&D) impacted by higher-than-anticipated volume of loose debris, requirements for process equipment removal, and decontamination of incinerator glove box.
- 241-Z pre-existing condition cover block issue, subsequent resolution and recovery actions, and recent work package issues now resolved.
- Design and constructability issues supporting pencil tank removal work.
- Delays in solid waste disposal activities and apportioned D&D Project Management due to overall delayed D&D activities.
- Delays in Special Nuclear Material de-inventory due to new DOE direction on path forward yet to be implemented.
- Delays in 234-5Z process equipment removal due to clearance issues and follow on training requirements.

Cost Performance (-\$1.8M/-1.8%): Primary contributors to the unfavorable cost variance include:

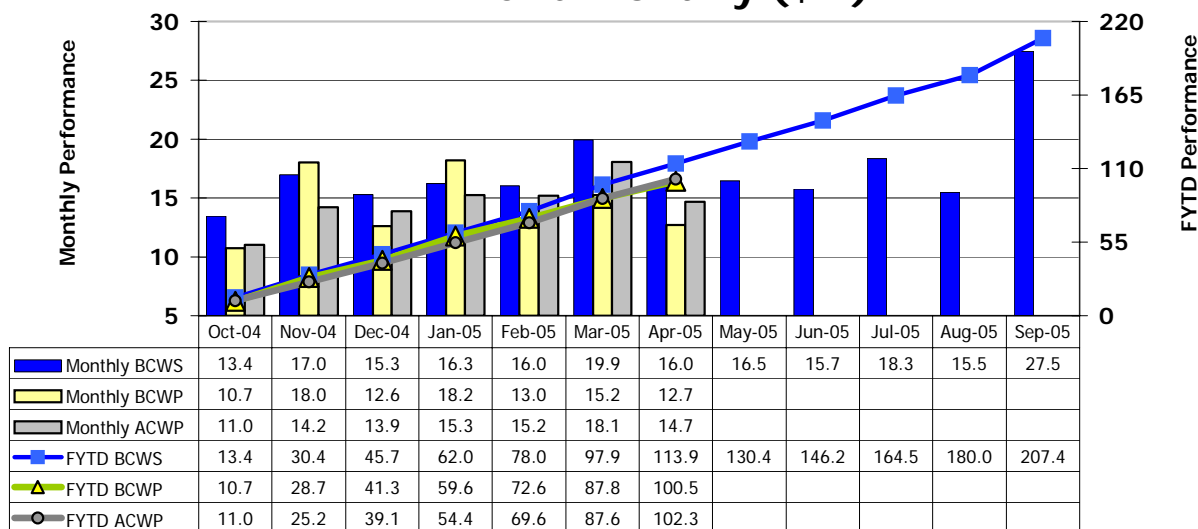
- Increased costs in 232-Z & 241-Z D&D work to support technical issue resolution and subsequent recovery actions.
- Fissile material movement outage and use of overtime to recover schedule in legacy plutonium holdup removal and disposition activities.
- Increased Regulatory Compliance support and increased labor effort to complete waste storage modifications.
- Increased costs for occupancy and dosimetry, coupled with production control initiatives.
- Unplanned costs for the Breathing Air Compressor Project.

The above negative cost variances are partially offset by:

- Delayed billing for solid waste disposition; efficiencies gained by using existing lab and SNM de-inventory teams to accelerate 234-5Z process equipment removal.
- Efficiencies in 236-Z project support and canyon tank planning and procurement; 242-Z entry planning; and closure services work.
- Lower cost in transition operations support due to reduced staffing levels.

FY 2005 Schedule/Cost Performance, continued

Performance Analysis FYTD and Monthly (\$M)



Milestone Achievement

Milestone Title	Type	Due Date	Actual Date	Forecast Date	Status/ Comments
Discontinue Waste Discharges from the 241-Z Tanks to Tank Farms	TPA PI	6/30/05	12/13/2004	-----	Complete
Complete Deinventory of DOE-STD-3013 Containers & Unirradiated Fuel by Shipment to SRS or Other Approved Location	PI	9/30/06		TBD	To Be Rebaselined
Remove and Disposition Pu Holdup in Process Equipment at PFP	PI	9/30/05		7/31/05	Ahead of Schedule
Transition 10 Facilities to Slab-on-Grade	PI	9/30/05		5/31/05	Ahead of Schedule
Decontaminate Glovebox HA-20MB	PI	3/31/06	10/28/2004	-----	Complete
Complete 100% Legacy Pu Holdup Removal and Disposition	TPA	9/30/06		7/31/05	Ahead of Schedule
Transition 232-Z Bldg Incinerator to Slab-on-Grade	PI TPA	3/31/06 9/30/06		3/31/06	On Schedule Ahead of Schedule
Remove Remaining SNM From PFP Such That Protected Area Not Required	PI	9/30/06		TBD	To Be Rebaselined
Disposition Miscellaneous PFP Nuclear Materials	PI	9/30/06		9/30/06	On Schedule
Transition 241-Z/ZA Facility to Demolition Ready	PI	9/30/06		9/30/06	On Schedule
Remove or Decontaminate 236-Z Pencil Tanks	PI	9/30/06		9/30/06	On Schedule
Remove or Decontaminate the 236-Z Process Equipment in Rooms 50 & 60	PI	9/30/06		9/30/06	On Schedule
Remove or Decontaminate the Remaining 236-Z Process Equipment	PI	9/30/06		9/30/06	On Schedule
Remove or Decontaminate 189 Gloveboxes and Hoods in 234-5Z	PI	9/30/06		9/30/06	On Schedule
Complete 242-Z Initial Entry & Characterization	PI	9/30/06		9/30/06	On Schedule
Cleanout Pu & Am Contaminated Gloveboxes and Tanks in 242-Z	PI	9/30/06		9/30/06	On Schedule
Dispose of Approximately 600 Pu Nitrate Containers at PFP	PI	9/30/06		9/30/06	On Schedule